

ABSTRACT OF THE DISCLOSURE

An underwater diving mask for use by a diver in an underwater diving environment has a viewing portion defined by the diver's face and a lens, a visual display device proximate the viewing portion to provide visual images to the diver, a speaking chamber configured to sealingly engage a portion of the diver's mouth to permit the diver to speak, and a sound transducer located proximal the speaking chamber. A computer system is disposed in a portion of the mask and is operatively coupled to the sound transducer and to the visual display device, where the computer system, the viewing portion and the speaking chamber are sealingly isolated from the underwater diving environment. The computer system receives electrical signals produced by the sound transducer and is configured to recognize and identify the electrical signals as spoken words of the diver, such that the identified spoken words provide input to the computer to direct the computer system to provide visual images to the visual display in response thereto, to facilitate hands-free operation of the diver.